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(54) Title: PROCESS FOR OBTAINING OF BULK MONOCRYSTALLINE GALLIUM-CONTAINING NITRIDE

(57) Abstract: The invention relates to new improvements in a process for crystal growth in the environment of supercritical ammonia-containing solution, which are based on use of specific azide mineralizers and result in the improved bulk Group XIII element nitride monocrystals, in particular bulk monocrystalline gallium-containing nitride, intended mainly for variety of nitride-based semiconductor products such as various opto-electronic devices. The invention further relates to a mineralizer used for supercritical ammonia-containing solution which comprises at least one compound selected from the group consisting of LiN₃, NaN₃, KN₃, and CsN₃.



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